Information Systems

Information Systems | INFORMATION SYSTEMS ADMINISTRATION

Program Description:

Foster a departmental commitment to excellent service for our internal and external customers. Provide leadership, strategic direction, coordination, and administrative support for the department, maintain Citywide Computer Inventory, PC Replacement Program, basic telephone rates, and Cell Phone Tracking & Payment Program.

Trends:

The number of departments in the City that rely on automation as part of their work process is increasing every year. Citizens are becoming more accustomed to technology in their daily lives and expect technology advances in government services to mirror those offered in the private sector.

Program Broad Goals:

Guide the strategic direction for City government in its use of technology to better serve the Scottsdale Community.

Administer the network, server, telephone, and personal computer infrastructure replacement accounts.

Administer the enterprise cell phone account and the enterprise specialty line account.

Program 2006/07 Objectives:

Discuss business objectives and initiatives with General Managers. Provide additional information on technology solutions for current business issues. Be an active participant in meetings that further regional solutions to common municipal issues.

Conduct annual physical verification of computer inventory. Update network, server, telephone and personal computer infrastructure replacement accounts. Monitor replacement of infrastructure.

Responsible for Citywide purchases of cell phones, plan changes and monthly billing. Provide customer support and training for the Cell Phone Tracking application. Responsible for ordering and tracking specialty lines as well as monitoring the receipt of the monthly billing statements.

Program Provided in Partnership With

Information Systems, Financial Services, City Auditor, HRS

Program Customers

All programs in Information Systems, Financial Services, all cell phone users, all Qwest users

Basic Equipment

Personal Computers, Microsoft Office Suite

Special Equipment

Verizon Software, Cell Phone Tracking Software, SmartStream, Microsoft Visio

City Council's Broad Goal(s)

Fiscal and Resource Management

Program Staffing	
1 FT Chief Information Officer	1.00
1 FT Customer Support Rep, Sr.	1.00
1 FT Data Conversion Operator II	1.00
1 FT Management Analyst, Sr	1.00
1 FT Office Coordinator Manager	1.00
1 PT Secretary	0.81
Total Program FTE	5.81

Information Systems | INFORMATION SYSTEMS ADMINISTRATION

Performance Measures

Program/Service Outputs: (goods, services, units produced)

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
# of computers maintained in performance of City business	2,675	2,728	2809	2961

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Target percentage of 95% of Cell Phone and	95%	95%	95%	98%
Telephone bills paid on time				

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	461,575	491,834	491,834	496,994
Contractual Services	62,045	67,614	67,614	66,969
Commodities	8,897	4,550	4,550	5,350
Capital Outlays	1,082	-	-	-
Total Program Budget	\$533,599	\$563,998	\$563,998	\$569,313

The Application Development, Integration, Management and Support program provides software engineering and technical support services for departments that deploy automated technology solutions. Services include the design and engineering of custom software solutions, as well as deployment and support for purchased software products. Additionally, this program is responsible for the management and protection of organizational "data" assets. Data-related services provided include database design, data security, and data backup / restore.

Trends:

The number of software solutions that we support continues to grow each year as new solutions are deployed. "Support" encompasses general troubleshooting, problem solving, enhancements, and migration (example: migration of solution from Windows 2000 to Windows XP). As the number of "supported" applications increases, our ability to tackle new projects decreases. The current ratio of supported applications to staff is 8:1. We have successfully maintained this high ratio because our solutions are built around the same technology framework.

Program Broad Goals:

Build, implement, and support software applications that are intended to improve staff efficiency and customer service.

Includes development of custom software solutions and implementation of commercial products.

Manage and protect corporate data assets.

Program 2006/07 Objectives:

Continue to provide technical support services for over 90 existing automated business solutions. Examples of these systems include Community Development, Fire Inspections, Internet Court Payments and several work order systems.

Maintain the City's Geographic Information System (GIS). In addition to the maintenance of the existing infrastructure this year the group will implement a next-generation GIS Utility Mapping System.

Build new custom software solutions. A key project this year is the redesign the Code Enforcement System. The new system will leverage the latest technology thus giving this group the tools it needs to provide its services to the community in the most effective manner possible.

Program Provided in Partnership With

All City departments and programs, enterprise systems that are used across all departments include the Land Information System, Virtual Call Center, and Vehicle Tracking (GPS), citizen-based on-line (Internet) services include on-line utility billing payments, on-line permit services, airport noise complaints, on-line maps

Program Customers

All City Departments, Scottsdale Citizens

Basic Equipment

Personal computers, database & web servers, software engineering tools, GIS software

Special Equipment

None

City Council's Broad Goal(s)

Fiscal and Resource Management

Program Staffing	
1 FT Applications & Database Mgr	1.00
1 FT Applications Project Leader	1.00
3 FT Development Coordinator	3.00
4 FT Development Coordinator, Sr.	4.00
1 FT Electrnc Communications Coord	1.00
1 FT Gis Director	1.00
2 FT Programmer Analyst, Sr.	2.00
1 FT Technician, Lead	1.00
1 FT Web Services Manager	1.00
Total Program FTE	15.00

Information Systems | APPL. DEV. INTEGRATION MGMT & SUPPORT

Performance Measures

Program/Service	Outputs:	(goods,	services,	units	produced)

# of software solutions supported	Actual FY 2003/04 80	Actual FY 2004/05 90	Projected FY 2005/06 100	Projected FY 2006/07 110
# of public "e-Gov" (Internet) services provided	16	20	24	30
Program/Service Outcomes: (based on prog	gram objectives)			
	Actual	Actual	Projected	Projected

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Provide support services for existing production application (market value)	\$1,350,000	\$1,500,000	\$2,000,000	\$2,000,000
Produce new applications in house in lieu of purchase (market value)	\$1,520,000	\$1,715,000	\$1,500,000	\$1,700,000

Expenditures By Typ	е			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	1,228,834	1,282,078	1,282,078	1,588,205
Contractual Services	89,012	143,345	143,345	167,701
Commodities	2,959	3,500	3,500	9,040
Capital Outlays	1,979	-	-	-
Total Program Budget	\$1,322,784	\$1,428,923	\$1,428,923	\$1,764,946

The Network Operations program develops, maintains, and supports the City's voice and data infrastructure, including all telephones, computer systems, radio systems, network and fiber based storage devices, and the underlying network required for these components to operate effectively. All systems located within the City's computer room are monitored on a 24-hour, 365 days per year basis.

Trends:

The volume of e-mail continues to grow, which places significant increased demand on the City's storage and server capacity. During the past year, the City's computing environment successfully processed over 80 million e-mail messages, an increase of 77% from the previous year. With this increased volume, the City has seen a significant increase in the number of viruses and unsolicited e-mails. Data storage and backup needs continue to increase rapidly as well. Network demand continues to grow, with the need for faster connectivity and increased bandwidth. In particular, the City's WAN (Wide Area Network) sites, such as City parks, and the City's mobile network require more network bandwidth.

Program Broad Goals:

Ensure the City's computing environment is secure from internal and external vulnerabilities.

Continue to enhance the City's communications network and computing infrastructure in order to maintain a high level of network connectivity and computing support.

Program 2006/07 Objectives:

To provide a contingent network and data replication infrastructure at an alternate facility that mitigates the damage to city business and operations should a disaster occur at the primary network/computer facility.

Provide day-to-day service and support of the City's technology infrastructure - install, monitor, and maintain the City's core network systems.

Increase the speed of the City Internet connection in order to maintain customer satisfaction and reliable web services.

Upgrade the City's Public Safety technology infrastructure, in order to provide a reliable, secure platform for the daily operations of the Police Department.

Program Provided in Partnership With

Financial Services, City Auditor, Capital Project Management, Right-of-way Management, technical liaisons within departments throughout the City

Program Customers

All City departments

Basic Equipment

Personal Computers, Servers, Network Switches and Routers, Telephone System, Firewalls, Multiplexers, Modems, Virtual Private Networks, Microsoft Office Suite

Special Equipment

Network, server and telephony management/diagnostic tools, high-volume printers, inventory control, backup and recovery systems, vehicles

City Council's Broad Goal(s)

Fiscal and Resource Management

Program Staffing	
1 FT Communications Director	1.00
1 FT Computer Operator	1.00
4 FT Computer Operator, Sr.	4.00
2 FT Enterprise Communications Engr	2.00
4 FT Enterprise Network Engineer	4.00
1 FT Enterprise Network Manager	1.00
1 FT Enterprise Systems Integrator	1.00
1 FT Information Technology Dir	1.00
1 FT Is Support Supervisor	1.00
1 FT Is Technician	1.00
1 FT Is Technician, Sr.	1.00
1 FT Network Security Engineer	1.00
1 FT Radio Communications Engineer	1.00
1 FT Radio Communications Tech	1.00
1 FT Systems Analyst, Sr.	1.00
4 FT Systems Integrator	4.00
1 FT Technician, Lead	1.00
1 FT Technology Director	1.00
1 FT Technology Resource Coordinat	1.00
1 FT Telecom Policy Coordinator	1.00
Total Program FTE	30.00

Program/Service	Outputs:	(goods,	services,	units	produced)	

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
# of SPAM emails blocked (monthly) from being delivered to the City (An average of 30 seconds per email is expended by staff)	129,000	2,319,000	46,100,000	94,187,000
Annual Disk Storage size (DAS, NAS, and SAN)	5 Terabytes	7 Terabytes	30 Terabytes	40 Terabytes

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Provide quality service while minimizing fiscal impact. (Phone service monthly costs per line)(2005/06 - includes all Fire Circuits)	\$20	\$20	\$30	\$29
Achieve a satisfaction approval rating of a 4.3 or above out of a possible 5.0 for Network Operations work requests	4.5	4.5	4.5	4.5

Expenditures By Type						
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07		
Personal Services	2,258,242	2,914,258	2,914,258	2,959,031		
Contractual Services	849,482	1,005,425	1,005,425	1,131,281		
Commodities	162,516	169,117	169,811	184,094		
Capital Outlays	45,977	16,500	-	88,000		
Total Program Budget	\$3,316,217	\$4,105,300	\$4,089,494	\$4,362,406		

The GIS Data Services program provides data maintenance services that keep Scottsdale GIS maps & databases up-to-date. Key activities that trigger maintenance include (but are not limited to) new subdivisions, commercial developments, capital projects, zoning changes, road widening, new easements, parcel splits/mergers, new/used home sales, and police beat changes. Additionally, the GIS program includes support staff that assist departments with advanced uses of GIS (3D modeling, spatial analysis and cartography) and manages the biennial acquisition of digital aerial photography.

Trends:

Historically GIS data was only available to the public and city staff through a select few locations. Now that the data is available online, citizens and city staff are increasingly expecting more layers of data to be provided. The number of requests for special maps increases yearly.

Program Broad Goals:

Maintain timely and accurately Geographic Information System "land" and "utility" maps & databases.

Support the use of GIS data by City staff and Citizens.

Exploit the use of GIS data for asset management, public safety, and community planning purposes.

Program 2006/07 Objectives:

Support the City's Fire Department with map layers or data as needed, including conversion of paper Pre-Emergency Planning Maps to electronic format.

Implement next-generation GIS Utility Mapping System.

Continue updates of core GIS land (parcels, streets, addresses, easements) and utility (water, sewer, storm) databases and improve the integrity of the data.

Program Provided in Partnership With

All departments; key partners include Inspection Services; Water Resources; Planning and Development Services

Program Customers

Water Resources (Blue Stake, Work Order Mgmt, Utility Maps, Master Planning), Drainage (Master Planning), Police (CAD GeoFile, ESAP Mobile Maps), Municipal Services (Pavement Mgmt, Work Order Mgmt), Planning Systems (Community Development System, Code Enforcement, Public Notifications), Transportation (Transportation Modeling, Barricade Mgmt) Fire (Computer Aided Dispatch, Pre-Emergency Planning Maps). Enterprise systems that are used across all departments include the Land Information System, Virtual Call Center, Vehicle Tracking (GPS), Citizen-based on-line (Internet) services and on-line maps (Digital Map Center)

Basic Equipment

Personal computers, database & web servers, software engineering tools, plotters and GIS software

Special Equipment

None

City Council's Broad Goal(s)

Fiscal and Resource Management

Program Staffing	
2 FT Gis Analyst	2.00
1 FT Gis Manager	1.00
6 FT Gis Technician	6.00
1 FT Is Technician, Sr.	1.00
Total Program FTE	10.00

Program/Service	Outputs:	(goods,	services.	units	produced)	
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	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Total # of map layers maintained by City Staff	60	65	70	75
Total # of sales of City GIS data	520	630	700	750

Percentage of utility map updates completed within scheduled time frames	Actual FY 2003/04 99%	Actual FY 2004/05 99%	Projected FY 2005/06 99%	Projected FY 2006/07 99%
Achieve a satisfaction approval rating of 4.0 or above out of a possible 5.0 for GIS map requests	4.1	4.3	4.5	4.5

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	716,069	785,814	785,814	821,449
Contractual Services	33,273	319,401	319,401	98,562
Commodities	4,166	4,500	4,500	4,000
Capital Outlays	-	-	-	-
Total Program Budget	\$753,508	\$1,109,715	\$1,109,715	\$924,011

The Project Management & Integration division provides technology project resources to all City departments. It is the primary point of contact for technology projects. Essential functions include but are not limited to: business analysis; project management; budget determinations for current and future technology (CIP requests); RFP processes; enterprise application support; systems analysis; computer configuration; report writing; small database development; web page development; and wireless support.

Trends:

While the Project Management & Integration division continues to be the primary point of contact for initiating and managing technology projects for all City departments, staff is increasingly filling key technology roles in projects managed outside of the division. In addition, the Project Management & Integration division has dedicated 1.75 FTEs to the implementation of the enterprise-wide electronic Document Management system.

Program Broad Goals:

Provide resources to assist in successful completion of IT projects in a variety of roles (Subject Matter Expert, Consultant, Team Member, Project Manager, etc).

Provide leadership and guidance in IT Project Management & Integration so that IT projects are successfully completed.

Coordinate or assist in coordinating resources throughout all phases of the project.

Program 2006/07 Objectives:

Continue to provide a methodology to manage technology projects toward a successful completion.

Assist in reducing redundant efforts, promote efficient use of resources, ensure adherence to Information Systems standards and keep projects in line with organizational strategies.

Provide technology expertise towards the successful completion of technology projects.

Program Provided in Partnership With

City departmental staff, technologists, Information Systems

Program Customers

All City departments and programs, Citizens of Scottsdale

Basic Equipment

City Network, Network Workstations and peripherals, Microsoft Office Suite

Special Equipment

Microsoft Visio, Microsoft Project, Microsoft FrontPage, SQL, Crystal Reports, Wireless equipment

City Council's Broad Goal(s)

Fiscal and Resource Management

Program Staffing	
4 FT Enterprise Systems Integrator	4.00
1 FT Proj Mgmnt & Integration Mgr	1.00
Total Program FTE	5.00

Program/Service	Outputs:	(goods.	services.	units	produced))
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	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
# of Projects	50	40	48	40
# of multi year projects	14	28	25	25

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Percentage of projects managed/executed successfully	80%	100%	100%	100%
Achieve a satisfaction approval rating from customers of 4.0 out of a possible 5.0	4.3	4.5	4.5	4.8

Expenditures By Type				
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	446,881	479,673	479,673	501,053
Contractual Services	9,213	14,151	14,151	26,978
Commodities	1,398	1,854	1,854	1,525
Total Program Budget	\$457,492	\$495,678	\$495,678	\$529,556

The Application Support division provides application programming and support for many of the City's primary financial applications (SmartStream financials, Webtime timesheet tracking, GenTAX tax and licensing, TotalHR payroll, etc.). This program also provides a variety of services that are related to employee technology training, desktop application support, user assistance for the City's GIS Internet applications and GIS data sales. We support numerous small database applications, specialized reporting and financial database migration.

Trends:

Financial institutions, Scottsdale citizens, and City of Scottsdale staff who are interested in obtaining or using City information, continue to look to the City to provide greater access to financial information, geographic map data and other City data. This trend includes an increase in online services that will be provided to citizens for access to that City data. Application Support is exploring options that will make certain types of data available to the citizens and staff of the City. Training for computer software programs and the use of mobile hardware continues to increase in importance, as more complex solutions are implemented for staff and put into use across the City.

Program Broad Goals:

Support software applications to increase efficiency and to improve customer service, especially within Financial Services and Learning technologies areas.

Provide financial application programming and support that increases the efficiency of Financial Services and other departments of the City.

Provide timely and dependable technology training opportunities and resources for the City staff to utilize in improving their business processes and organizing their time.

Program 2006/07 Objectives:

Maintain continual technical programming support for key City financial applications, while also providing quality support for the City's efforts to implement new financial applications to replace aging existing systems. Assist in the final stages of migrating the sales tax, licensing and payroll into new systems.

Provide educational training classes that allow the city staff to learn more about new technology and increase their knowledge of computer applications that are utilized in their daily work.

Support the efforts of the Geographic Information Systems staff in their goal to increase the use of GIS data across the City of Scottsdale, through support of Internet GIS applications and through the sale of Scottsdale GIS data.

Program Provided in Partnership With

Financial Services, Human Resources, Field Services, Solid Waste, Scottsdale Citizens (Internet), all City departments (Intranet GIS site, Training)

Program Customers

Financial Services (WebTime Timesheet Tracking, SmartStream Financials, GenTAX Tax and Licensing, Total HR payroll), all City departments

Basic Equipment

Personal Computers, Windows 2003 servers, telephones, Microsoft Visual Studio .NET development software, Microsoft Office Suite, Oracle database programming tools, ESRI GIS software

Special Equipment

High speed Internet connectivity for citizens

City Council's Broad Goal(s)

Fiscal and Resource Management

Program Staffing	
1 FT Applications Project Leader	1.00
1 FT Development Coordinator	1.00
1 FT Enterprise Systems Integrator	1.00
1 FT Is Support Manager	1.00
1 FT Programmer Analyst	1.00
1 FT Programmer Analyst, Sr.	1.00
1 FT Technology Learning Coord	1.00
Total Program FTE	7.00

Program/Service	Outputs:	(goods.	services.	units	produced)	١
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	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
# of people taught in classes given by the IS Training program. This includes both classroom-taught training and online training	500	1121	1250	1300
# of Citizen and City staff support calls instructing users on the use of the GIS/IS Internet site (Map room, Land Information Web, Data Sales, etc.)	275	350	400	350

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Achieve a satisfaction approval rating from customers of the training office of 4.0 out of a possible 5.0 for technology training customers	4.1	4.5	4.7	4.7
Provide a minimum of 98% of technical programming support hours for key financial and learning applications	99%	99%	99%	99%

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	607,571	668,103	668,103	695,564
Contractual Services	48,376	52,471	52,471	54,930
Commodities	9,589	16,091	16,091	15,450
Capital Outlays	-	-	-	-
Total Program Budget	\$665,536	\$736,665	\$736,665	\$765,944

The Help Desk/Desktop Technical Support program provides complete technical support for all City desktop and laptop computers, monitors, printers and related peripheral devices; receives all new computing equipment into the Tech Shop and installs City-standard operating systems and application software packages; qualifies for "self-maintainer" status with major hardware vendors to expedite warranty repairs and repair parts purchases; and operates a 24/7 Help Desk service to provide timely response to calls for service.

Trends:

The installed base of desktop computers increases in proportion to the growth in the number of City employees and development of applications within the City. As the technology evolves and communications capabilities grow, we will see increased need for mobile computing hardware and applications. The City will be increasing its development of wireless services to departments such as Water, Inspection Services, Code Enforcement, and especially the Public Safety departments (Fire & Police). The computers used in a mobile environment continue to be "ruggedized" laptops, but we expect that less-costly devices such as Tablet PCs, and enhanced PDAs (Personal Data Assistants) such as the Blackberry will provide opportunities for improved and more efficient business processes to evolve. We have seen some decline in the number of "personal" printers, and we expect that the need for such printers will continue to decline as our customers become more familiar with the features, capabilities and economies of the digital Copier/Printers installed throughout the City. We anticipate the need to train our technicians in the emerging wireless technologies so that they are prepared to support the expected growth in the City's use of this technology.

Program Broad Goals:

Provide technical support for computers and peripheral equipment to the City.

Set-up and install annual replacement-cycle computers.

Provide technical support to Wireless computing in the City.

Program 2006/07 Objectives:

Acknowledge customer calls for service by next working day.

Develop and maintain a staff of qualified and certified technicians.

Achieve a 90% customer satisfaction performance ratio

Receive and image all replacement computers to City-standard specifications.

Install replacement computers at customer locations and assist in migration of data from old to new computers.

Train and equip the IS technicians to support the new wireless infrastructure for our employees that use mobile computing.

Program Provided in Partnership With

Information Systems Department

Program Customers

All City departments

Basic Equipment

Personal computers, printers, associated peripheral equipment

Special Equipment

Symbol scanners, ISIS Inventory database, servers, HEAT - Help Desk Software, Vehicles

City Council's Broad Goal(s)

Fiscal and Resource Management

Program Staffing	
6 FT Is Technician	6.00
1 FT Is Technician Supervisor	1.00
4 FT Is Technician, Sr.	4.00
Total Program FTE	11.00

Information Systems | HELP DESK/DESKTOP TECHNICAL SUPPORT

Performance Measures

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Citywide support to desktop and laptop computers	2,675	2,728	2809	2961
Work Orders completed	5,637	5,900	6,120	6500

	Actual FY 2003/04	Actual FY 2004/05	Projected FY 2005/06	Projected FY 2006/07
Maintain quality support to customers while exceeding a calculated optimum tech/computer ratio of 250:1	268:1	273:1	281:1	290:1
Maintain a Customer Satisfaction rating of 4.5 on a 5.0 scale rating scheme	4.4	4.5	4.5	4.5

Expenditures By Type	•			
	Actual 2004/05	Adopted 2005/06	Approved 2005/06	Proposed 2006/07
Personal Services	594,741	742,038	742,038	805,382
Contractual Services	22,858	40,046	40,046	50,692
Commodities	15,565	19,292	19,292	20,292
Capital Outlays	-	-	-	-
Total Program Budget	\$633,164	\$801,376	\$801,376	\$876,366